Work Order ID 112740 *1127*4*0* Page 1 February-06-14 10:49:35 AM Item ID: D3492-5 Accept *N900040100* Setup Start **Revision ID:** Item Name: Plug 2/06/14 **Start Qty: 80.00 Start Date: Cust Item ID:** Req'd Qty: 80.00 Required Date: 2/20/14 **Customer:** Reference: Run Process Plan: MCJ Date: 14-02-06 Tooling: Approvals: Date: Stop SPC (Y/N): Date: Date: Sequence ID/ Operation **Tool ID** Tool # Plan Reject Set Up/ Reject Accept Insp. Work Center ID Description Code Qty Qty Stamp **Run Hours** Number **Draw Nbr Revision Nbr** D3492 Е 100 0.00 Hardinge CNC LATHE SMALL *100* Hardinge 0.00 Memo Hardinge CNC Lathe Small 1-Turn as per Folio FA634 & Dwg D3492 Dwg Rev: ____ Folio Rev: AA 110 QC2- Inspect parts off machine FAI/FAIB 0.00 Bt 14-02-21 *110* QC 0.00 Memo Quality Control

120

QC8- Inspect parts - second check

0.00

120

\$⁺

0.0

Quality Control

81 0

LR 14-02-24

Memo

0.00

DQA: _		Date:			MODE ORDER NON	~	ONICO!	DRAANCE / UDDATE				DART
QA Closed:		Date:			WORK ORDER NON-	-((JNFO	RIVIANCE / UPDATE		ork Order up	date only	AEROSPACE
Work Order	-•				DISPOSITION			AGA	INST DE	PARTMENT	/PROCESS	
Part No	D				Rework Scrap Use-as-is Suspected Unapproved			→	II Fab shing	1	Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
Root	1		<u> </u>	Desci	ription of work order update		Initial	Action		Sign &		
Cause	Date	Step	Qty		or non-conformance		ief Eng	1		Date	Verification	QC Inspector
Design		<u> </u>									Vermeation	de inspector
Doc/Data	7											
Equip/Tooling		į.										
Handling/Pre	7											
Material												
Operator												
Offset/Setup				_		İ						:
Process				7	And the Control of th	1				: 	I	
Supplier				, ,		ł						
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Landing	g Gear			89 7	General		_					
	Bending			,	Bend		Folio/F	Program		Outside Dim	ensions	Pressure/Forced
_	Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
	Cracks				Broken/Damage/Defect		Hardwa	ire		Part Incorred	:t	Temperature/Cure
_	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unqualified	ı 🗌	Part Lost/Mi	ssing	Weld
<u> </u>	Cuffs				Contamination		Instruct	tions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
	Crushing			_	Countersink		Misalig	gned/off center		Positioned W	/rong	_
<u> </u>	Heat Trea			_	Cut Too Short		Mislabe	eled		Power Loss/	Surge	Other
<u> </u>	Inspection	•	Tube		Drawing		Misread	t				
	Marks/Ch				Drill Holes		Off-set					
	Turning S				Finish		Out of (Calibration				
1	Wave/Tw	ist in Tub	e		Fit/Function		Out of	Sequence				

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Work Orde February-06-14						Page 2							
Revision ID:	D3492-5			Accept	*N900	040	100)*	Setup	Start Stop	I VI	S1* S2*	
Start Date: Required Date: Reference:	2/06/14 2/20/14	Start Qty: 80.00 Req'd Qty: 80.00	*80* *80*		Cust Item I Customer:	D:					1 4	. 12	
Approvals:		n:	Date:			ate:			Run	Start Stop	!/	R1*	•
Sequence ID/ Work Center II 150 *150* HandFinish Hand Finishing		Operation Description Chemical Conversion Coa	it per QS1005 4.1	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Qt	y	Reject Number	-	
*160 *160* Powdercoat		White Gloss(Ref:4.3.5.1) Memo (Flat End Onl START TIMI OVEN TEMI FINISH TIMI	7. ^{y)} <i>3.45</i> Perature: <i>33</i>	0.00 0.00				_81_	<u>d</u>	14	1-3-11		94 34

170

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Quality Control

QC3- Inspect Part Finish

Memo

DQA:		Date	e:		· •							
QA Closed:		Date	e:		WORK ORDER NON-	-C(ONFO	RMANCE / U		Work Order ι	indate only	AEROSPACE
					DISPOSITION					DEPARTMEN'		
Work Orde	er:					,			_	-	-	
					Rework			Skid-tube	Crosstube	_	Water Jet	Engineering
Part N			 		Scrap			Machining	Small Fab		od. Eng. Coor.	Quality
NCR N	ام				Use-as-is		Thern	noforming	Finishing	Rec/Sto	ore/Packaging	Other
NCN					Suspected Unapproved	1		Large Fab	Composite		Supplier	_
Root				Desc	ription of work order update	1	Initial	Act	tion	Sign &	1	
Cause	Da	te Step	Qty		or non-conformance	Ch	nief Eng	Desci	ription	Date	Verification	QC Inspector
Design				1								
Doc/Data												
Equip/Tooling												
Handling/Pre						:						
Material												
Operator												
Offset/Setup												
Process												
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		·		·		FAI	ULT CAT	regory				
Landir F	ng Gear	_		_	General		1 .		Г	_	r -	
}	Bend	•		-	Bend	_	1	rogram	-	Outside Dir		Pressure/Forced
}		e Not Conc	entric	-	BOM/Route	<u> </u>	Grain	*	<u> </u>	Over/Unde	├	Set-up
-	Crack			<u> </u>	Broken/Damage/Defect	<u> </u>	Hardwa		-	Part Incorre	}	Temperature/Cure
}		o/Kink/Ripp	ie/wave		Burrs	<u> </u>	1	on Incomplete/Ur	· -	Part Lost/N	- -	Weld
}	Cuffs				Contamination	_	1	ions Incomplete/l	Jnclear	Part Moved		Wrong Stock Pulled
}	Crush	-		-	Countersink	-	1 -	ned/off center	-	Positioned		¬₋.
}		Treat	n Tuha	-	Cut Too Short		Mislabe		L	Power Loss	/Surge	Other
}		ction Strip i s/Chatter	ii Tube	\vdash	Drawing Drill Holos	\vdash	Misread	1		_		
}		s/Chatter ng Sequenc	0	-	Drill Holes Finish		Off-set	Calibuation				
}	_	Twist in Tu		-	Fit/Function	-	1	Calibration Sequence				
1	1 ** 4 4 4	-, 1 ***:		4	II IV I UIICUVII							

Work Ord February-06-14				*112	2740*						Page 3
Item ID: Revision ID: Item Name:	D3492-5	:: ·		Accept	*N900	040	100)* s	etup Star Stop	ı Vı .	S1* S2*
Start Date: Required Date Reference:	2/06/14 :: 2/20/14	Start Qty: 80.00 Req'd Qty: 80.00	*80 [*] *80		Cust Item I Customer:	D:					
Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):		nte:		R	un Star Stoj	, " 	R1* R2*
Sequence ID/ Work Center I	D	Operation Description Identify as per dwg & Sto	ck Location [P0	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 Packaging Packaging		Мето		0.00				×81	¢_	<u> </u>	14/03/

0.00

0.00

190

190

Quality Control

QC21- Final Inspection - Work Order Release

Memo

MW 14-03-13 MF 14-3-12

DQA:			Date:											79	
						WORK ORDER NON	-CC	ONFO	RMANCE / U				_		AEROSPACE
QA Closed:			Date:								Wo	ork Order up	date only		
Work Orde	er:					DISPOSITION				AGAINST	DEI	PARTMENT	/PROCESS		
					_	Rework	1		Skid-tube	Crosstube			Water Jet	\neg	Engineering
Part N	١o.					Scrap	1		Machining	Small Fab		Pro	d. Eng. Coor.		Quality
						Use-as-is	1		noforming	Finishing			re/Packaging	\neg	Other
NCR N	No					Suspected Unapproved			Large Fab	Composite		•	Supplier		
													·		
Root	Ì		ļ		Desci	ription of work order update		initial		tion		Sign &	i	Ì	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desci	ription	_	Date	Verification		QC Inspector
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Doc/Data															
Equip/Tooling	Н														
Handling/Pre	Н		,												
Material -															
Operator	Н														
Offset/Setup	Н														
Process	\vdash					·									
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опарргочец							FΔI	UIT CAT	l regory						
Landir	ng Ge	ar				General		OLI CA	I COOK!						
[ending				Bend	Г	Folio/P	Program	[Outside Dim	ensions [7,	Pressure/Forced
	C	entre No	t Concen	itric		BOM/Route		Grain		Ì		Over/Under	⊢	_	Set-up
	Пс	racks				Broken/Damage/Defect		Hardwa	ire			Part Incorred	}	_	Temperature/Cure
	c	rimp/Kin	k/Ripple,	/Wave		Burrs		Inspect	ion Incomplete/Ui	ngualified		Part Lost/Mi	ssing	_	Weld
	C	uffs				Contamination		Instruct	ions Incomplete/l	Jnclear		Part Moved		╗	Wrong Stock Pulled
	C	rushing				Countersink		-1	ned/off center			Positioned V	ے Vrong		-
	Щн	eat Trea	t			Cut Too Short		Mislabe	eled			Power Loss/	Surge [\neg	Other
	∐lr	rspection	Strip in	Tube		Drawing		Misread	t	•					
	Ш№	/larks/Ch	atter			Drill Holes		Off-set							
	т	urning S	equence			Finish		Out of (Calibration						
	llν	Vave/Tw	ist in Tub	e		Fit/Function		Out of	Senuence						

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

February-06-14 10:49:40 AM

Work Order ID: 112740

D3492-5

Parent Item Name: Plug

112740

D3492-5

Start Date: 2/06/14

Required Date: 2/20/14

Start Qty: 80.00

Required Qty: 80.00

Comments:

Parent Item:

IPP Rev:A 11.04.19 per dwg revC DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.375		Purchased	No			100	f	26.5000	0.06	6			***************************************
*N/6061T6	D0.276	*							**				

M6061T6R0 375

6061-T6 Round Bar .375"

Location	Loc Qty	Loc Code
MAT012	26.5	
123483	2.5	
m <u>J28054</u>	24	

4,725 /14/02/23

Page 1

DQA:		Da	ate: _										W .	A DT
QA Closed:		D	ate:			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE	VA (- ul. Oud - u	. d. k	_ (AEROSPACE
QA Closed.		D.	ate.		Τ.					VV	ork Order up	date only		
Work Orde	er:					DISPOSITION			AGAINST	T DE	PARTMENT	/PROCESS		
						Rework			Skid-tube Crosstube	<u>-</u>		Water Jet	T E	ngineering
Part N	No.					Scrap			Machining Small Fat	<u> </u>	Pro	d. Eng. Coor.	┪ ̄	Quality
		-				Use-as-is		Therr	moforming Finishing	3	4	re/Packaging		Other
NCR N	No				_ 9	Suspected Unapproved			Large Fab Composite			Supplier		
									· · · · · · · · · · · · · · · · · · ·					
Root						tion of work order update		nitial	Action		Sign &			
Cause	Da	ite St	ер	Qty	01	r non-conformance	Ch	ief Eng	Description		Date	Verification		QC Inspector
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Process	\vdash													ļ
Supplier	\vdash		ŀ											İ
Training												1	1	
Transport														
Unapproved							FA!	UT CA	TEGORY				Ш.	
Landii	ng Gear					General	FAC	OLI CA	IEGORT					
2011411	Bend	ling			□Re	end		leolio/E	Program	_	Outside Dim	onsions F		ssure/Forced
		₆ re Not Co	ncent	ric		DM/Route	-	Grain	Togram	-	Over/Under	⊢	Set	
	Cracl				_	oken/Damage/Defect		Hardwa	are	\vdash	Part Incorred	 	_	nperature/Cure
	⊢ ⊣	p/Kink/Ri	pple/\	Wave	-	irrs	\vdash	ł	ion Incomplete/Unqualified	\vdash	Part Lost/Mi		Wel	T. Control of the con
	Cuffs				\vdash	ontamination		1	tions Incomplete/Unclear	-	Part Moved			ong Stock Pulled
	Crus					ountersink		\$	gned/off center	\vdash	Positioned W	L. Vrong		ing Stock i diled
		Treat			-	it Too Short		Mislabe			Power Loss/		Oth	er
	_	ection Str	ip in T	ube	\vdash	rawing	-	Misread			1 2 0. 2000/.		1000	
		cs/Chatte			$\overline{}$	rill Holes	-	Off-set						
	Turn	ing Seque	nce		-	nish	\vdash	ł	Calibration					
	Wav	e/Twist in	Tube	!	Fit	t/Function	\vdash	1	Sequence					

DART AEROSPACE L	TD	Work Order:	112740
Description: Plug		Part Number:	D3492-5
Inspection Dwg: D3492	Rev: DE LA		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.375	+/-0.010	0.375			mic 1"	BT -01
Ø0.188	+0.005/-0.001	0.189				
0.045	+0.000/-0.002	0.044			ven	BT-04
0.500	+/-0.010	0.503	•			
0.060	+/-0.005	0.060				
0.060	+/-0.005	D.060				
0.090	+0.000/-0.002	0.090				
						·

Measured by:	Audited by:	Preliminary Approval:
Date: 14-02-21	Date: 1/02/21	Date:

Rev	Date	Change	Revised by	Approved
Α	06.07.11	New Issue P/O D3492-045	KJ/JLM	
В	06.10.16	Updated to Revision B	. KJ/JLM	
С	07.10.30	Tolerance revised for Ø0.375	KJ/EC/DD	2/
D	08.11.28	Dwg Rev updated	KJ/EC 4A	
E	11.06.21	Dwg Rev updated	KJ 🙀	

D3492-XX PLUG (SEÉ TABLE)--NAS1611 O-RING (SEE TABLE)

D3492-XXX PLUG PARTS LIST

		O FARTS LIST								
	DESCRIPTION	PART NUMBER	QTY -055	QTY -053	QTY -051	QTY -049	QTY -047	QTY -045	QTY -043	QTY -041
7	PLUG ASSEMBLY	D3492-041								Х
7	PLUG ASSEMBLY	D3492-043							Х	
٦	PLUG ASSEMBLY	D3492-045						Х		
	PLUG ASSEMBLY	D3492-047					Х			
7	PLUG ASSEMBLY	D3492-049				Х				
7	PLUG ASSEMBLY	D3492-051			_ X					
٦.	PLUG ASSEMBLY	D3492-053		Х						
	PLUG ASSEMBLY	D3492-055	Х							
	PLUG	D3492-1								1
	PLUG	D3492-3							1	
	PLUG	D3492-5						1		
	PLUG	D3492-7					1	1		
	PLUG	D3492-9				1				
	PLUG	D3492-11			1					
7	PLUG	D3492-13		1						
	PLUG	D3492-15	1							
-	O-RING	NAS1611-005						1		
\dashv	O-RING	NAS1611-007		-			1			
\dashv	O-RING	NAS1611-010								1
\dashv	O-RING	NAS1611-012		1						
\dashv	O-RING	NAS1611-013							1	
٦	O-RING	NAS1611-015	1		1					
7	O-RING	NAS1611-016				1	T			

NOTES: 1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER
NO. 117 740 MCJ

14-02-06

E	ADD -05	5 PLUG ASSY	AP	13.08.08	
D	INCORF WAS 0.0	ORATED DEO	AJS	11.05.24	
С	ADD -04	19/-051/-053, CI	ANGE DRAWING FORMAT	PH	07.10.05
В	ADD -04	7; UPDATE DI	PH	06.05.11	
Α	NEW IS	SUE	PH	06.01.04	
REV.	DESCR	PTION	BY	DATE	
DESIG	N	PH	DART AEROSP	ACE L	TD !
DESIG		AP	DART AEROSP HAWKESBURY, ONTAI		
	N		HAWKESBURY, ONTAI DRAWING NO.		
DRAW	N ŒD	AP	HAWKESBURY, ONTAI		DA
DRAW	N (ED APPR.	AP AJS	HAWKESBURY, ONTAI DRAWING NO.		DA REV. E

DATE 13.08.08

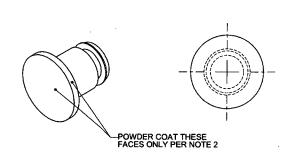
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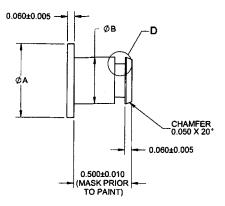
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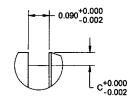
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DETAIL D

D3492-XX PLUG

D3492-XX PLUG MACHINING DETAILS

)	6	A TENSO.	÷		
u	PIN	XXX	В	С	MATERIAL SPEC
	D3492-fi 🦥	0.625	0.394	0.050	M6061T6R0.625
	D3492-3	0.750	0.582	0.045	M6061T6R0.750
	D3492-5	0.375	0.188	0.045	M6061T6R0.375
_	D3492-7	0.500	0.270	0.045	M6061T6R0.500
	D3492-9	0.938	0.750	0.045	M6061T6R1.000
I	03492-11	0.850	0.664	0.045	M6061T6R0.875
I	03492-13	0.750	0.510	0.045	M6061T6R0.750
9	03492-15	0.850	0.640	0.050	M6061T6R0.875

D

NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR
QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100)
(REF. DART MATERIAL SPEC M6061T6R0.000)

- (REF. DART MATERIAL SPEC M606 176R0.000)
 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INC

DESIGN	PH	DART AEROSPACE LTD					
DRAWN	AP	HAWKESBURY, C	ONTARIO, CANADA				
CHECKED	A55	DRAWING NO.	REV. E				
MFG. APPR.	177	D3492	SHEET 2 OF 2				
APPROVED	100	TITLE	SCALE				
DE APPR.		PLUG	4:1				
DATE 13.	80.80	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AN NOT TO BE USED FOR ANY PURPOSE OR COPPED O	Y DART AEROSPACE LTD DIS SUPUSED ON THE EXPRESS CONDITION THAT IT IS RECOMMUNICATED TO ANY OTHER PERSON WITHOUT HOM DART AEROSPACE LTD.				

D

С

DQA:		Date:												
QA Closed:			Date:			WORK ORDER NON-CONFORMANCE / UPDATE Work Order update only Work Order update only								E
Work Orde)r:	<u> </u>				DISPOSITION		AGAINST DEPARTMENT/PROCESS						
WOIK OIGE	-					Rework		au					i	
Part N	lo.					Scrap	Skid-tube Crosstube Machining Small Fab			Pro	Water Jet od. Eng. Coor.	Engineering Quality	İ	
	-	, , , 			_	Use-as-is	Thermoforming Finishing				- J-	Other	l	
NCR No.				Suspected Unapproved						Supplier		1		
Root					Desc	ription of work order update		Initial	Act	tion	Sign &			
Cause		Date	Step	Qty	l	or non-conformance	Ch	nief Eng	Desc	ription	Date	Verification	QC Inspector	
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						} _	FÁ	ULT CA	TEGORY				· · · · · · · · · · · · · · · · · · ·	
Landi	ng G	iear				General								
		Bending			Bend			Folio/F	Program		Outside Dim	nensions	Pressure/Forced	
		Centre Not Concentric Cracks				BOM/Route		Grain			Over/Under	tolerance	Set-up	
						Broken/Damage/Defect		Hardwa	are		Part Incorre	ci	Temperature/Cure	
	Crimp/Kink/Ripple/Wave					Burrs		Inspect	ion Incomplete/U	nqualified	Part Lost/Missing		Weld	
	Cuffs					Contamination		Instruct	tions Incomplete/	Unclear	-i		Wrong Stock Pulled	ł
		Crushing				Countersink		Misalig	gned/off center	Γ	Positioned \			
	Heat Treat				Cut Too Short			Mislabeled		Power Loss/Surge		Other		
	Inspection Strip in Tube				Drawing		Misread				_	-		
		Marks/Ch	natter			Drill Holes		Off-set						
	Turning Sequence					Finish		Out of	Calibration					
	Wave/Twist in Tube					Fit/Function		Out of	Seguence					